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10/501,250	12/06/2004	Robert Patrick Hof	056291-5264US	7528

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EXAMINER

SOLOLA, TAOFIQ A

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1625

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/501,250
Filing Date: December 06, 2004
Appellant(s): HOF, ROBERT PATRICK

Gregory T. Lowen
Morgan Lewis & Bockius LLP
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 5/19/08 appealing from the Office action mailed 9/19/07.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

EP 1 024 139

KIZAKI ET AL

8-2000

Naik et al., "Phase Transfer Catalysis: Chemistry and Engineering" Am. Inst. Chem. Eng. J., Vol44, no 3 (March, 1984), pp 612-646.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kizaki et al., EP 1 024 139 A1 in view of Naik et al., Am. Inst. Chem. Eng. J. (1984), Vol 44(3), pages 612-646.

Applicant claims a process of making compounds of formula I comprising reacting compounds of formulae 2 and 4 in the presence of compound of formula 3, a phosphonium phase transfer catalyst.

Determination of the scope and content of the prior art (MPEP §2141.01)

Kizaki et al., teach a similar process using ammonium phase transfer catalyst.

Ascertainment of the difference between the prior art and the claims (MPEP §2141.02)

The difference between the instant invention and that of the Kizaki is that Applicant use phosphonium catalyst instead of the ammonium catalyst used by Kizaki et al.

Finding of prima facie obviousness---rational and motivation (MPEP §2142.2413)

However, Naik et al., teach that both catalysts are well known in the art and are commonly used as phase transfer catalysts. Therefore, the instant invention is prima facie obvious from the teachings of Kizaki et al., and Naik et al. One of ordinary skill in the art would

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have known to substitute phosphonium catalyst for ammonium catalyst at the time the invention was made. The motivation is from the teaching of Naik et al.

Response to Argument

Applicant contends that Kizaki et al and/or Naik et al., fails to teach that ammonium and phosphonium may be used interchangeably and there is no design need or market pressure to do so. The recent decision in *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct 1727,----, 82 USPQ2d 1385, 1394, 1396 (2007), foreclosed this argument. Design need and/or market pressure is not absolutely required for obvious to try. The totality of Naik et al., is providing an obvious reason to try phosphonium in phase transfer reactions. Particularly because it is disclosed as more stable and widely used in phase transfer reactions (Table 1). Applicant also argues that several classes of catalysts are listed. This is not persuasive because only 5 catalysts are listed in Table 1. Applicant further argues that "obvious to try" test in *KSR* has not been satisfied in the instant case. This is not persuasive because Naik et al., in Table 1, provide adequate reasons (except cost) as to why one of ordinary skill may be motivated to substitute ammonium with phosphonium as phase transfer catalyst (PTC). The recognition of the catalysts by Naik et al., as phase transfer catalysts creates an obvious to try situation, and applicant's invention confirms they are in fact interchangeable. A person of ordinary skill would have good reasons to interchange the catalysts, since there are 5 options cited in Table 1.

Applicant asserts that phosphonium fails to work as well as ammonium in the phase transfer (PT) reactions by Starks et al., "Phase Transfer Catalyst", Academic Press (1978), and Bram et al., Israel J. Chem. (1985), 26, pp 291-298. This is not persuasive. Just because phosphonium didn't work as well as ammonium in a particular reaction is not conclusive

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evidence it would not work in other reactions. In addition, failure to work as well as ammonium in the cited studies may be due other factors, such as, design and/or human errors and therefore ~~there~~ are no reasons not to try ~~it~~ in other reactions.

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Applicant ~~refers~~ to US 5,594,153 and Halpern's article: Phase Transfer Catalysis Communications (1997) 3:1-12, and contends there is no teaching or suggestion that any catalyst other than ammonium containing catalyst is useful for esterification reaction. This is not persuasive for the reason set forth in *KSR*, Id. Also, there is no explicit teaching in the references that phosphonium is not applicable in those reactions. Using a catalyst in a reaction is not conclusive evidence that other catalysts would not work in that particular or similar reactions.

Applicant argues that the prior arts fail to teach ~~the~~ specific substituents in claims 2-3 and the variables (molar concentrations and temperature ranges) in claims 4-8. This is not persuasive because the argument relates to anticipatory rejection. Had the specific substituents in claims 2-3 and the variables being thought in the prior arts the rejection would not have been based on obviousness. As per MPEP 2144.06, the issue is not whether two equivalents are recognized as interchangeable or variables are thought, if equivalency is recognized in the prior art, it is obvious to substitute one for the other. The recognition of the catalysts as equivalents by Naik et al., creates an obvious to try situation for applicant.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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